ABSTRACT OF THE DISCLOSURE

A method and apparatus for enhancing channel adapter performance that includes a host interface, a link interface, a packet processing engine, an address translation engine, and a completion queue engine. The host interface is connected to a memory by a local bus. The memory contains one or more completion queues and an event queue. The link interface is connected to a network. The packet processing engine moves data between the host interface and the link interface. The address translation engine translates a virtual address into a physical address of a translation protection table in the memory. The completion queue engine processes completion requests from the packet processing engine by writing the appropriate completion queue and/or event queue. The packet processing engine is not impacted by any address translation functionality, completion queue accesses, or event queue accesses thereby significantly enhancing the performance of a channel adapter.